

4. (Twice Amended) The catalyst according to claim 2, wherein the catalyst further comprises at least one member selected from the group consisting of cobalt and magnesium.

5. (Amended) The catalyst according to claim 4, wherein the cobalt content is from 0.01 to 30 based on atomic ratio of cobalt to ruthenium.

B2 6. (Twice Amended) The catalyst according to claim 4, wherein the magnesium content is from 0.5 to 20 wt.% as reduced to MgO.

7. (Twice Amended) The catalyst according to claim 2, wherein the inorganic oxide carrier further comprises alumina.

8. (Amended) The catalyst according to claim 7, wherein the alumina is at least one member selected from the group consisting of α -alumina and γ -alumina.

Sub C1 10. (Twice Amended) A method for producing the catalyst as described in claim 2, comprising contacting a solution comprising ruthenium, a solution comprising ruthenium and cobalt, or a solution comprising ruthenium, cobalt and magnesium with a zirconia carrier; drying the carrier; and calcining the carrier.

B3 11. (Twice Amended) A method for producing the catalyst according to claim 2, comprising contacting a solution comprising zirconium and ruthenium, a solution comprising zirconium, ruthenium, and cobalt, or a solution comprising zirconium, ruthenium, cobalt, and magnesium with an inorganic oxide carrier; drying the carrier; and calcining the carrier.

12. (Twice Amended) A method for producing hydrogen or a synthesis gas, comprising contacting an organic compound and a reforming gas with a catalyst wherein the catalyst comprises an inorganic oxide carrier wherein the inorganic oxide carrier comprises from 0.05 to 20 wt.% zirconium as reduced to ZrO_2 and ruthenium.

13. (Amended) The method according to claim 12, further comprising contacting the catalyst with a starting material for producing hydrogen or a synthesis gas wherein the starting material is a hydrocarbon.

14. (Amended) The method according to claim 13, wherein the hydrocarbon is at least one member selected from the group consisting of methane, liquefied petroleum gas, naphtha, kerosene, and gas oil.

15. (Twice Amended) The method according to claim 12, further comprising contacting the catalyst with a feedstock wherein the feedstock comprises at least one member selected from the group consisting of methanol, ethanol, and dimethyl ether.

16. (Twice Amended) The method according to claim 12, wherein the reforming gas comprises a mixture of oxygen, steam, and carbon dioxide.

17. (Amended) A method for reforming hydrocarbon, comprising contacting carbon dioxide gas with a catalyst comprising a zirconia carrier and ruthenium to produce a resultant mixture; and reforming hydrocarbon with the resultant mixture.

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18. (Amended) A method for reforming hydrocarbon, comprising contacting carbon dioxide gas with a catalyst comprising an inorganic oxide carrier, from 0.05 to 20 wt.% zirconium as reduced to ZrO_2 , and ruthenium to produce a resultant mixture; and reforming hydrocarbon with the resultant mixture

19. (Twice Amended) The method according to claim 17, wherein the ruthenium is present in an amount of from 0.05 to 20 wt.%.

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20. (Twice Amended) The method according to claim 17, wherein the catalyst further comprises at least one member selected from the group consisting of cobalt and magnesium.

21. (Amended) The method according to claim 20, wherein the cobalt content is from 0.01 to 30 based on the atomic ratio of cobalt to ruthenium.

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22. (Twice Amended) The method according to claim 20, wherein the magnesium content is from 0.5 to 20 wt.% as reduced to MgO .

23. (Twice Amended) The method according to claim 18, wherein the inorganic oxide carrier comprises alumina.

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24. (Amended) The method according to claim 23, wherein the alumina is at least one member selected from the group consisting of α -alumina and γ -alumina.

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26. (Twice Amended) The method described in claim 17, further comprising contacting a solution comprising ruthenium, a solution comprising ruthenium and cobalt, or a solution comprising ruthenium, cobalt and magnesium with a zirconia carrier; drying the carrier; and calcining the carrier.

27. (Amended) The method as described in claim 18, further comprising contacting a solution comprising zirconium, a solution comprising zirconium and ruthenium, a solution comprising zirconium, ruthenium, and cobalt, or a solution comprising zirconium, ruthenium, cobalt, and magnesium with an inorganic oxide carrier; drying the carrier; and calcining the carrier.

29. (Amended) The method according to claim 17, wherein the hydrocarbon is methane.

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30. (Amended) A method for reforming natural gas, comprising contacting natural gas with the catalyst according to Claim 2.

31. A method, comprising reforming at least one member selected from the group consisting of hydrocarbon and natural gas in the presence of the catalyst according to Claim 2 and a mixture comprising carbon dioxide and steam.--

SUPPORT FOR THE AMENDMENT

The specification has been amended to add reference signs utilized in the Figures. The claims have been amended for clarity. Support for the amendment to the specification is found